

Fujitsu recommends Windows.

Data Sheet

FUJITSU CELSIUS C620 Workstation

1U of Pure Workstation Performance

If you need maximum workstation performance out of the datacenter, Fujitsu's compact CELSIUS C620 is your choice. The 1U rack-mount workstation sophisticatedly combines high-end graphics and single processor performance at highest density. Thus it is the ideal system for all users of CAx, DCC, Visualization or HPC applications, having only limited space. Full security is ensured by keeping the high-quality CELSIUS C620 in the datacenter.



Density

Space saving workstation

- Full workstation performance packed in only 1U

Performance

Fully concentrate on core activities

- Sophisticated combination of Intel® Xeon® processor and high-end graphics cards ideal for remote CAx or HPC

Best visualization

Full GPU performance out of the datacenter

- FUJITSU CELSIUS C620 e.g. as a node in a render cluster

CELSIUS offering

Different workstations to meet individual needs

- Expands the CELSIUS portfolio to the datacenter

Manageability

Easy manageability saves time and resources

- Onboard gigabit remote management controller (iRMC S3)



Components

Processor	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Xeon® processor E3-1280v2 (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB)
	Intel® Xeon® processor E3-1275v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1270v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB)
	Intel® Xeon® processor E3-1245v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1240v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB)
	Intel® Xeon® processor E3-1230v2 (4 Cores / 8 Threads, 3.30 GHz, up to 3.7 GHz, 8 MB)
	Intel® Xeon® processor E3-1225v2 (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1220v2 (4 Cores / 4 Threads, 3.10 GHz, up to 3.5 GHz, 8 MB)
	Intel® vPro™ with all Intel® Xeon® processors
Operating systems	
Operating system	Windows 8.1 Pro 64-bit
	Windows 8.1 Pro
	Windows 8.1 64-bit
	Windows 8.1
	Windows 8 Pro
	Windows 8
Operating system compatible	Windows 7 Professional 64-bit
	Windows® XP
	Linux
	Windows® Server 2008 R2
Operating system notes	Windows® Server 2012
	For some configurations third party drivers are currently not available or configuration restrictions may apply.
	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
	Certified for Red Hat® Enterprise Linux
Memory modules	Certified for SUSE Enterprise Desktop
	Certified for SUSE Enterprise Server
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
Graphics	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	Ultra-high-end 3D: NVIDIA® Quadro® 6000, 6 GB, 448 cores, PCIe x16, 1x DVI-I, 2x DisplayPort
	Ultra-high-end 3D: NVIDIA® Quadro® K5000, 4 GB, 1,536 cores, PCIe x16, 1x Dual Link DVI-I, DVI-D, 2x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4000, 3 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2000D, 2 GB, 384 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® K2000, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: AMD FirePro™ W5000, 2 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: AMD FirePro™ V4900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K600, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: AMD FirePro™ V3900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® 410, 512 MB, 192 cores, PCIe x16, 1x DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS 510, 2 GB, 16 cores, PCIe 2.0 x16, 4x miniDP
	Professional 2D: NVIDIA® NVS 310, 512 MB, 16 cores, PCIe 2.0 x16, 2x DisplayPort
	Professional 2D: NVIDIA® NVS 300, 1 GB, 16 cores, PCIe 2.0 x16, 2x LFH59 (DP/DVI-I)
	GPU computing card: NVIDIA® Tesla™ K20, 5 GB, 2,496 cores, PCIe x16
	GPU computing card: NVIDIA® GRID K2 8GB, 8 GB, 3,072 cores, PCIe x16
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP
Personal Supercomputing	
	Coprocessor: Intel® Xeon Phi™ Coprocessor 5110P, PCIe x16

Hard disk drives (internal)	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 1,000 GB, 2.5-inch, business critical
	HDD SATA III, 10,000 rpm, 600 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 3,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SAS, 10,000 rpm, 900 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 600 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 300 GB, 2.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (business critical HDDs required) Up to 20 GB of HDD space is reserved for system recovery
Drives (optional)	DVD SuperMulti SATA slim
SCSI / SAS Controller	RAID Contr BBU Upgrade for RAID 5/6 Ctrl
	RAID 5/6 Ctrl. 6 Gbit/s 8 ports int. 512 MB Cache
	RAID 0/1 Ctrl. 6 Gbit/s 8 ports int.
Interface add on cards/components (optional)	
	Gigabit Ethernet PCIe x1, DS
	Dual 10 Gigabit Ethernet PCIe x8

Base unit

Base unit	CELSIUS C620
Mainboard	
Mainboard type	D3188
Formfactor	proprietary
Chipset	Intel® C216
Processor socket	LGA 1155
Processor type support	Intel® Core™ i3 processor#Intel® Xeon® processor E3-1200v2 product family
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3) ECC/non-ECC
Supported capacity RAM (max.)	32 GB
Memory frequency	1,600 MHz
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	2x Built-in 10/100/1,000 MBit/s Intel® 82579 LM and Intel® 82574L
BIOS features	BIOS Flash EPROM update by software
	Recovery BIOS
	Unified Extensible Firmware Interface (UEFI)

I/O controller on board

Serial ATA total	5
thereof SATA III	2 (port 0 and 1)
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10 (Windows XP not supported) Intel® Smart Response Technology (depending on CPU)
SATA RAID support	0, 1, 10, 5

Interfaces

USB 2.0 total	2
USB 3.0 total	4
USB front	2x 2.0
USB rear	4x 3.0
USB internal	1
VGA	1 (depends on processor, via DVI to VGA adapter)
DVI	1 (depends on processor)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Ethernet (RJ-45)	2

Input device / components

Input devices (optional)	Optical USB tilt wheel mouse Keyboard
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Drive bays

Drive bays total	7
2.5-inch internal bays	4
3.5-inch internal bays	2
5.25-inch external bays	1
Drive bay notes	Up to 4x 2.5-inch HDDs/SSDs (cold plug) or Up to 2x 3.5-inch HDDs (cold plug)

Slots

PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height (double slot density)
PCI-Express 2.0 x4 (mech. x16)	1 x (/) Low profile

Graphics on board

Shared video memory	up to 1,759 MB
TFT resolution (VGA)	1,024 x 768 pixel 1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,600 x 1,200 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel
TFT resolution (DVI)	1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel
Graphics features	DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.1 (depending on CPU) Open CL® 1.1 (depending on CPU)

Graphics on board

Graphics notes	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz
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Electrical values

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 87% / 90% / 87%
Rated voltage range	100 V - 240 V (AC Input)
Rated frequency range	47 Hz - 63 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	500 W
Power supply output	500 W

Noise for standard configuration (HDD, ODD)

Dimensions / Weight / Environmental

Dimensions (W x D x H)	431 x 683 x 44.45 mm
Operating position	Horizontal
Weight	approx. 13 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS C620
Model	CR1U
Europe	CE Class A*
USA/Canada	FCC Class A
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL)
Compliance notes	* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Additional Software

Additional software (preinstalled)	Nero Essentials S (burning software) Fujitsu Recovery (hard disk based recovery) Norton Internet Security (incl. Firewall) 60 days version Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 10 Essentials XL (burning/backup/DVD-playback suite)

Security

System and BIOS Security	EraseDisk Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
User Security	User and supervisor BIOS password Hard disk password

Manageability

Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT Intel® Active Manageability Technology v8.0 (not activated, not set up)
Manageability software	DeskView 10.x client management including:
DeskView components	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
Manageability link	http://www.fujitsu.com/fts/manageability http://www.fujitsu.com/fts/solutions/high-tech/solutions/workplace/manageability/feature-finder.html

Miscellaneous

	Extended lifetime
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Packaging information

Packaging dimension (mm)	264 x 490 x 87 mm
Packaging dimension (inch)	10.39 x 19.29 x 3.43 inch
Max. quantity / pallet	12
Packaging notes	printed user documentation is bleached in chlorine free process

Warranty

Standard Warranty	3 years (depending on country)
Service level	Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Maintenance and Support Services - the perfect extension	
Recommended Service	9x5, Response Time: Next Business Day
Spare Parts availability	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

Recommended Accessories

FUTRO L420

The FUJITSU FUTRO L420 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Dual-monitoring enables you to increase your productivity. As a smart zero client, the FUJITSU FUTRO L420 provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.

Order Code:
S26361-K1062-V200

FUTRO L620



The FUJITSU FUTRO L620 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Quad-monitoring enables you to increase your productivity. As a smart zero client, the FUJITSU FUTRO L620 provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.

Order Code:
S26361-K1062-V300

SpaceMouse™ Pro



Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.

Order Code:
S26381-K459-L100

More information

Fujitsu OPTIMIZATION Services

In addition to the FUJITSU CELSIUS C620, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU CELSIUS C620, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/CELSIUS

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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Contact

Fujitsu Technology Solutions
Website: www.fujitsu.com/fts
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